Shouryan Patil

Pune | LinkedIn | +91 9096932131 | work.shouryan@gmail.com | GitHub | Website

Motivated M.Sc. Bioinformatics graduate with skills in computational biology, genomics, and drug discovery. Proficient in Python, R, Linux, RNA-Seq analysis, and molecular docking, with hands-on experience in NGS, cancer drug repurposing and gene expression studies. After a 6-month internship, I'm eager to join a research team, contribute to meaningful discoveries, and prepare for a Ph.D. abroad.

WORK EXPERIENCE

BVG Life Sciences Limited

Chinchwad, Pune

Computational biology and R&D Intern

April 2024 – October 2024

- Advanced Molecular Docking: Used AutoDock4 and AutoDock Vina to identify herbal ligands for disease-targeted proteins, aiding novel drug discovery.
- **Data Visualization & Analysis:** Leveraged R for docking result visualization and molecular interaction analysis, ensuring precise reporting.
- NGS Data Analysis: Performed preprocessing (FastQC, trimming), alignment (HISAT2, STAR), quantification (featureCounts, Salmon), and differential expression analysis (DESeq2).

CODSOFT Remote

Python Programming Intern

February 2024

- **Python Development Projects:** Built a To-Do List app, calculator, password generator, and Rock-Paper-Scissors game, showcasing problem-solving and programming skills.
- **GUI & Logic Implementation:** Developed interactive applications with user-friendly interfaces and functional logic using Python.

EDUCATION

M.Sc. Bioinformatics (CGPA: 8.48)

Dr. D. Y. Patil Arts, Commerce & Science College

B.Sc. Biotechnology (CGPA: 8.00)

Modern College of Arts, Science & Commerce

Senior Secondary Education (12th Grade) (60%)

Acharya Shri D. B. Dadawala Junior College

Matric (10th Grade) (72.20%)

Modern High School

Pimpri, Pune
June 2023 – April 2025
Ganeshkhind, Pune
June 2020 – April 2023
Kasba Peth, Pune
June 2019 – April 2020
Shivajinagar, Pune

June 2017 – April 2018

SKILLS

Programming & Scripting: Python (Biopython, pandas) | R | Bash | Linux

NGS Data Analysis: Samtools | Bedtools | Bioconductor | RNA-seq Analysis | Snakemake | Nextflow | GATK

Databases & Resources: NCBI (BLAST, GEO) | 1000 Genomes | dbSNP

Bioinformatics Tools: AutoDock | GROMACS | UCSC Genome Browser | MySQL

Visualization & Analysis: Matplotlib | seaborn | ggplot2

Other Tools: Git | GitHub | MS Excel | Power BI

PROJECT

R.

Parkinsons Gene Expression Analysis (Link)

May, 2025

Analyzed RNA-Seq data from GSE295831 to identify DEGs and disrupted pathways in Parkinson's disease due to SNCA duplication using DESeq2 and functional enrichment analysis.

RNA-Seq Analysis for CAR-T Target Discovery (Link)

March, 2025

Identified 28 upregulated surface-expressed genes as CAR-T targets in TCGA breast cancer data using DESeq2 and visualizations in

Drug Repurposing for Colorectal Cancer (Link)

November, 2024 - February, 2025

Screened FDA-approved drugs via docking and dynamics, identifying Pazopanib and Brequinar as candidates targeting key colorectal cancer pathways.

Automated Docking Pipeline with AutoDock Vina (Link)

January, 2025

Developed a Python-based automation script for molecular docking with AutoDock Vina, enabling large-scale ligand screening. Automated docking, extracted binding affinities, and ranked ligands to accelerate drug discovery.

CERTIFICATIONS

Certifications: Genetics and NGS for Bioinformatics (Udemy) | Linux Tutorial (Great Learning) | My SQL Basics (Great Learning) | Business Intelligence using Power BI (Skill Nation) | R Programming Language (Great Learning) | Excel for Beginners (Great Learning)